

AMENDMENTS TO THE SPECIFICATION:

Please replace the present abstract with the following paragraph:

The protective relay for an induction motor includes a first program function which establishes a first thermal threshold value for a start condition of the motor, using a start condition thermal model. The thermal condition of the motor is determined by measuring the motor's thermal response to stimulus. A comparator compares the start condition thermal representation with the first thermal threshold value and monitors whether the first thermal threshold value is exceeded by the start condition thermal representation. A second thermal threshold value is established for a run condition of the motor, including a selected time constant which results in the time-current curves of the start and run conditions being substantially continuous. A representation of the thermal condition of the motor is then developed in response to stimulus current. A comparator then compares the run condition thermal representation with the second thermal threshold value.

Please amend the first full paragraph of the description as follows:

As indicated above, the use of start and run condition thermal models to provide protection for motors based on the actual heating and cooling of the motor during operation is known. The electrical analog representations of the start and run conditions are briefly discussed above and discussed in some detail in the '784 patent, and are shown in Figures 1 and 2. Again, the start condition of the motor is when the measured current to the motor (I) is greater than 2.5 times the full load current, while the run condition of the motor is defined as when the measured current is less than 2.5 times the full load current. The full load current ("FLC") value is supplied by the manufacturer.